

REMARKS

Applicants thank the Examiner for the thorough consideration given the present application. Claims 1-16 and 21-23 are currently being prosecuted. Additional claim 23 has been added. The Examiner is respectfully requested to reconsider his rejections in view of the amendments and remarks as set forth below.

Telephone Call

A call was placed to Examiner Lopez on July 3, 2003 concerning the possibility of an interview. However, an interview did not result from this call.

Rejection Under 35 U.S.C. § 102

Claims 1, 4-12 and 16 stand rejected under 35 U.S.C. § 102 as being anticipated by Otto (German Patent No. 34 03 281). This rejection is respectfully traversed.

Claim 1 describes a filter for a cigarette, having a combination of elements, including a cylindrical core for filtering tobacco smoke, a tubular sheath made of filtering material for filtering tobacco smoke which surrounds the core, passages between the core and the sheath which are spaced circumferentially and extend continuously between open ends and a tipping paper circumferentially surrounding the sheath.

The Examiner described the Otto reference as having a cylindrical filtering core 14, a tubular filter sheath 22 surrounding the core, passages formed by corrugated paper layer 20 and tipping paper 24. The Examiner argues that paper 22 forms a tubular filter sheath.

However, the English translation of the Otto reference clearly points out that this is nothing more than a covering paper and is not a filtering element. This element is described in the paragraph starting on page 8, line 10 of the English translation as a porous covering (wrapping) paper 22. It is also described in claim 1, paragraph (d) by the same description. There is no description of this paper having any type of filtering properties.

The Examiner argues that Applicants' specification states on page 6 that the sheath can be made of paper. This is true. However, in order for paper to be used as a filter, it is commonly processed in a craping procedure in order to make it easier to form the sheath into a rod. When it is craped, an internal structure having longitudinal crinkles is formed which has a large number of minute axial passages. As the smoke passes through these axial passages, it is possible for the tar and nicotine to be caught in the filtering paper. This is completely different from Otto's covering paper 22 which is a single layer and which helps to define the longitudinal channels created by the corrugated sheath 20. No filtering is described and there is no reason to believe that a single sheet of paper would act as a filter. Thus, Applicants submit that this Otto reference does not teach the combination of elements described in claim 1 and especially it does not teach a tubular sheath made of filtering material for filtering tobacco smoke. In view of this, Applicants submit that the Otto reference does not teach the present claimed invention and that claim 1 defines thereover.

Claims 2-16 and 21-23 depend from claim 1 and as such are also considered to be allowable. In addition, each of these claims recites additional features. Thus, claim 2 describes the relative sizes of the sheath and core. Claim 3 describes the relative resistances

of the sheath and core. Claim 7, 10 and 13 describe the inner and outer peripheral surfaces of the sheath as being permeable. Claims 5, 6, 8 and 9 describe the particulars of the longitudinal grooves. Claim 14 describes the cross-sectional area of the passages. Claim 15 describes the relative length of the filter. Thus, many of these claims recite features also not seen in the Otto reference. Accordingly, these claims are additionally allowable.

Claim 23 has been added to specifically describe the radial air flow in the sheath. This is described in the specification on page 4, lines 12 and 13. In the present invention, air can flow through the sheath to reach the passages and allow air to mix with the smoke which is being carried by the passages. By adjusting the permeability of the sheath, it is possible to adjust the amount of air being mixed with the smoke and accordingly the taste of the smoke as sensed by the smoker. There is no indication in the Otto reference of such radial flow, especially in a tubular sheath made of filtering material for filtering tobacco smoke. Applicants submit that claim 23 especially defines over the Otto reference.

Rejection Under 35 U.S.C. § 103

Claims 2, 3, 14, 15, and 21 stand rejected under 35 U.S.C. § 103 as being obvious over Otto. The Examiner feels that it would have been obvious to utilize specific features of these claims, such as the thickness of the sheath, the ratio of the sheath, the thickness to the diameter of the core and the total cross-sectional area of the passages. Applicants submit that these claims are allowable based on their dependency from allowable claim 1 and also because there is no teaching in Otto that these features would be obvious.

Claims 13 and 22 stand rejected under 35 U.S.C. § 103 as being obvious over Otto in view of Gonterman (U.S. Patent No. 4,649,943). This rejection is respectfully traversed.

The Examiner cited the Gonterman reference to show perforations of the corrugated wrapper forming the passages on the circumference of the filter core. However, even if this reference does teach this feature, Applicants submit that these claims are still allowable based on their dependency from allowable claim 1. Applicants furthermore submit that this combination of references does not teach the invention described by the combination of elements of the independent claim. In view of this, Applicants submit that this rejection is likewise overcome.

No Prosecution History Estoppel

Claim 1 is hereby presented in independent form. No prosecution history estoppel would apply to the interpretation of the limitations set forth in claim 1 and the claims that depend therefrom in view of the fact that this subject matter has been continuously presented since the original filing of the present application.

CONCLUSION

In view of the above remarks, it is believed that the claims clearly distinguish over the patents relied on by the Examiner, either alone or in combination. In view of this, reconsideration of the rejections and allowance of all the claims are respectfully requested.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Mr. Robert F. Gnuse (Reg.

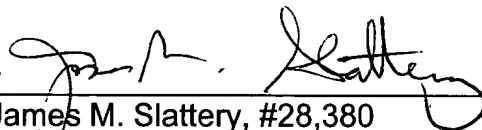
No. 27,295) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.


In accordance with 37 C.F.R. 1.121, since the only changes being made by this Amendment is the addition of claim 23, a marked-up version of the changes made to the application is not required.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By 
James M. Slattery, #28,380
P.O. Box 747
Falls Church, VA 22040-0747
(703) 205-8000

 JMS/RFG/ags
1131-0444P